

REMARKS

Claims 1-28 are now pending in this application, with claims 1, 14, 23, and 24 being independent. Claims 1-22 have been amended to define still more clearly what Applicants regard as the invention. Claims 23-28 have been added.

At paragraphs 3-8 of the Office Action, the drawings were objected to for the reasons given. The amendments to the specification presented herein address these issues. It is submitted that no new matter has been added by the amendments. With respect to the Examiner's comments at paragraph 8 in particular, it is noted that at page 16, line 9, reference numeral --136-- has been added after "valve member" on the basis of Fig. 5; on page 9, line 32, the recitation "The pipe 34 is provided with valve 33" has been added on the basis of Figs. 1-4; and on page 10, line 25, the recitation "The outlet fitting 39 is provided with a valve 41 in Fig. 3" has been added on the basis of Fig. 3. Withdrawal of this objection is respectfully requested.

At paragraph 9 of the Office Action, the specification was objected to for the reasons given. Applicant has amended the specification to remove the references to the claims. It is noted that at page 2, lines 31-32, the added text was previously recited in originally filed claims 2-13; and at page 3, lines 1-2, the added text was previously recited in originally filed claims 15-22. Therefore, it is submitted that no new matter has been added by these changes. Accordingly, withdrawal of the objection to the specification is respectfully requested.

At paragraphs 10-17 of the Office Action, claims 4, 6, 14, and 16-22 were objected to for the reasons given. These claims have been corrected. Accordingly, withdrawal of this objection is respectfully requested.

Claims 8, 11, 14, and 16 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The claims have been carefully reviewed and amended as deemed necessary

to ensure that they conform fully to the requirements of Section 112, second paragraph, with special attention to the points raised in paragraphs 20-23 of the Office Action. It is believed that the rejection under Section 112, second paragraph, has been obviated, and its withdrawal is therefore respectfully requested.

Claims 1, 14, 16, 17, and 21 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 1,965,866 to Tolman.¹ Claims 2 and 15 were rejected under 35 U.S.C. § 103(a) as being obvious from Tolman in view of British Document GB 288862 (hereinafter GB ‘862); claims 3 and 22, as being obvious from Tolman in view of U.S. Patent No. 6,974,279 to Morohashi²; claims 4-11, 13, and 18-20, as being obvious from Tolman in view of EPO Document EP 1179682 A2 (hereinafter ‘682) and Morohashi; and claim 12, as being obvious from Tolman in view of Morohashi and JP 9301504 (hereinafter ‘504).

Applicants submit that independent claims 1, 14, 23, and 24, together with the claims dependent therefrom, are patentably distinct from the cited references for at least the following reasons.

Tolman not disclose a method and apparatus for conveying material according to the present invention, but, rather, a special steam jet air exhauster operating conveyer. A notable difference between the claimed liquid mist ejector and the steam jet air exhauster of Tolman is that one liter of mist corresponds to 1700 liters of steam. Further, the same volume of liquid, i.e., the mist claimed, is much more efficient in generating suction/vacuum in the

¹Paragraph 25 of the Office Action lists only claim 1 as being rejected over Tolman; however, since paragraphs 27-30 respectively make out rejections of claims 14, 16, 17, and 21 over Tolman, it is presumed that the Examiner meant to list claims 14, 16, 17, and 21 as also being rejected over Tolman.

²Here again, it is presumed that paragraph 6 meant to list claim 22 as being rejected over Tolman in view of Morohashi, since paragraph 7 makes out such a rejection.

ejector device. Claim 1, for example, recites that the ejector apparatus is operated with an actuating medium, wherein liquid mist is utilized as the actuating medium. Nothing in Tolman would teach or suggest this feature. And it would not have been obvious for a person skilled in the art to reach the liquid mist ejector of the present invention on the basis of the Tolman patent. Mist is not steam.

Moreover, special means are needed for producing steam (which is of course hot). Producing steam does not save – rather it increases – use of energy. Steam also is difficult to conduct, because special valves and sealings are needed in the piping due to the heat.

Furthermore, in Tolman, there are further sprays for washing the air in the chamber
10. Applicant assumes that these sprays are also needed for cooling the hot steam from the steam exhauster.

Accordingly, Tolman does not teach, and it would not be obvious for a person skilled in the art, to use liquid mist as in the method and apparatus according to the claimed invention.

By utilizing liquid mist as the actuating medium, an extremely efficient suction effect can be achieved. In addition, a significant saving effect of energy can be achieved, up to, e.g., 50% compared to a pneumatic ejector apparatus. Moreover, liquid mist is extremely efficient in eliminating particles and reducing odor nuisances in the ejector device. Further advantages are described in the present specification, e.g., at pages 3 and 4.

For at least the foregoing reasons, independent claims 1, 14, 23, and 24, and the claims dependent therefrom, are seen to be clearly allowable over the cited references.

Also in the Office Action, claims 4-13 and 18-22 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. 10/591,302.

It is noted that the provisional double patenting rejection is not the only rejection remaining in either of these two applications. Accordingly, Applicant will address this issue at the appropriate time.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Respectfully Submitted



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